1

(a)

On Pathology — Defin^n of it 15.

on the Uses of Diseases. 5
Definition of Disease. 15.
Causes of Disease — ibid

Gentlemen,

I have hitherto considered the humain body as the divines consider the human mind in paradise, that is in a perfect or healthy state. It remains now that we view this body as divines view the mind after the fall, that is in an imperfect or diseased state. Sickness and death like moral evil were the consequences of the first act of the disobedience of the first man to the will of his creator. It is true the execution of the sentence of death denounced against him, was delayed beyond the day of his apostacy, but the causes which finally produced it began to act upon his system as soon

he lost ~~his~~ image of his maker. Every element in nature took part with his offended creator, and conspired to destroy his life. Their operation for a while was feeble and slow. - hence we read that men for 2000 years after the fall, attained to the great age of nearly a thousand years. It was not for sometime after the deluge that the life of man was contracted to its pre=sent limits. Many causes concurred to produce this change in the duration of human life. One of the most powerful has been ~~the~~ influence of the deluge upon the surface of the earth, & the temperature and quality of the atmosphere; but other causes seem to have combined with

it, for not only the earth & Air, but the Sea – all our Aliments and Drinks – all our occupations & pursuits – insects and reptiles – wild and Domestic Animals, our own malignant passions, nay even our very pleasures all seem to have to have taken part with the offended majesty of heaven and to have conspired to destroy the life of man. That life is the effect of impressions, and preserved only by the moderate degree of them, or by counter-acting Stimuli ~~too~~ is no less consonant to Religion, than to true philosophy. It would seem as if life ~~was~~ were the Offspring of a constant Strife, and that it owed its existence for 10, 20, 50 & even an 100 years

wholly to the ~~temporary~~ successive victories of the stimuli enumerated in the lectures upon animal life, over the causes which con=
=spire to extinguish it.

In entering upon the history of the ma=
=ladies & disheartening diseases to which the human body & mind are exposed, let us not arraign the divine Goodness nor suppose the benevolent Father of the human race de=
=lights in the ~~misery~~ pain or sickness of his Creatures. ~~This~~ ~~is~~ This is so far from being the case, that they are both blessings in disguise, and in the present imperfect state of human nature are absolutely necessary to individual and general happiness. To console ~~you~~ us under the melancholy view of human misery

which I am about to lay before you, I shall briefly mention the kind and important uses which diseases are probably intended to answer in the present state of the ~~[illegible]~~ world.

1 Diseases lead us to the study of Anatomy, whereby we are led to admire the infinite wisdom & goodness of the supreme Being discovered in the structure of the human body. Without such Objects as the annoyance of diseases, and the preservation of health, who would ever handle a dissecting knife or enter an anatomical ~~lecture~~ theatre? ~~The lancets and conspire to render them both disagreeable, and nothing but duty, and the~~ And unless this were done, ~~but without the objects~~ all the wisdom

and goodness of the supreme Being discovered in the structure of the human body would have been lavished upon it in vain, and would have perished ~~it~~ with it when it descended into the grave.

2 Diseases have been the means of impelling us to the study not only of the ~~anatomy~~ structure of the human body, but of all other animals in order to discover the uses of every part of them, ~~the~~ many of which would knowledge thus obtained, ~~has~~ been called ~~Physiology. Much~~ as we derive from ~~such~~ the examination of dead bodies, whether those of our species or ~~bad~~ dumb animals, ~~it is adding~~ ~~of the functions of both would~~ never have been known to us had they ~~they~~ not been discovered by ~~accident~~ the effects of

diseases upon them.

3 Diseases have led us to study the works of the Creator in the vegetable, mineral and animal kingdoms. It is true many of the wants of man in civilized society have impelled him to explore the wilderness and bowels of the earth, but how few discoveries have those wants ~~made~~ produced in ~~the~~ natural history and chemistry ~~[illegible]~~ compared with the more powerful motive of obtaining relief from sickness and pain?

4 Diseases ~~[illegible]~~ by imposing constant study and attention ~~upon~~ in search of their ~~[illegible]~~ causes, seats, symptoms and remedies, contribute very much to improve and extend the intellectual faculties of the mind.

6 the exercise of the

5 Without Diseases, ~~the world would be~~
moral virtues, particularly of humanity
and benevolence would have been very
much limited in their operations. How
small are the distresses of poverty when
unaccompanied with sickness! — It is
in Hospitals & Dispensaries in which
Charity finds the most ample & constant
employment, and in which man is
permitted to become in the most eminent
degree the deputy of that Attribute of the Deity
which delights in the relief of human
misery.

6 The human body & mind are so formed
that contrast is necessary to their pleasures &
happiness. The ~~[illegible]~~ serene & temperate
weather of June, is rendered more pleasant by

mollifying the cold & storms of Winter - the morning light, cheers us most when it has succeeded a ~~night~~ long night of darkness; - Deformity renders ~~[illegible]~~ beauty more captivating, and the evils of error & vice ~~[illegible]~~ enhance the charms of truth & virtue. In like manner the inestimable blessing of health is a proper relish for & desired chiefly from ~~[illegible]~~ its having been preceded by the dread of its being followed by sickness & pain.

7 Did we relinquish our present comfortable residence in this world in the full enjoyment of health, and of all the blessings that are connected with it, death would be terrible to us in prospect, beyond the possibility of enduring it; but diseases are kindly sent to reconcile us to death, may more in some instances to render it the first object of our

wishes. But

by Diseases not only reconcile us to our own deaths, but the pains & sufferings they create in our dearest friends, reconcile us to their deaths likewise, and sometimes cause us to look for with solicitude, and to welcome the moment which ~~that~~ by terminating their present sufferings shall put an end to their misery.

By the physical influence of Diseases upon the moral faculties, they conduce very much to improve our virtues and to form in us habits of moral order & Goodness. The virtue produced by these means is of a passive nature, and this has always been considered as more estimable in the sight of God & man than that which is simply active. "It is not so much a sign

of a great man (says Wm Penn) to do great things, as it is to suffer great things with resignation and fortitude". Thousands & thousands of people have acquired this precious virtue by the sufferings of a dangerous acute, or chronic disease.

We have hitherto mentioned the combined effects of disease & pain, but pain alone has many advantages connected with it. It informs us in many cases of the seats of diseases, - it is one of their principal signs, and when it occurs in their early stage it disposes sick people to desist from their ordinary pursuits, and to seek by rest, or medical aid for relief. It imparts

vigor & activity to the mind, and in the last place it is a remedy for many diseases. ~~This is evidence~~ The universal practice of mankind has always done homage to ~~the~~ pain in certain circumstances of the system. We are ~~so~~ disposed to suspect a child is ~~is~~ dead, ~~or in great danger of death~~ when it does not utter signs of pain ~~and we are~~ from the first inspirations of the air upon its lungs & skin, and we are ~~ex~~ disappointed when our friends ~~cease to express~~ express their pain by groans or tossings in their beds in the critical and dangerous state of their diseases. But the beneficial effects of pain are best seen in the mortality of those diseases which come on without it, such as consumptions, cancers, chronic inflammations of the liver & frozen limbs. In the last, ~~the~~ we are

V I have thus far spoken of the benefits we derive from what are called acquired diseases only; but the body derives great benefit from what I have called natural ~~[illegible]~~ or what might be called "healthy" diseases. ~~diseases~~ These are sleep - hunger - thirst - menstruation - pregnancy and parturition. ~~They help to~~ The latter are necessary to give the first impulses to life - the former are necessary to preserve it. In short the body is kept alive as certainly by these diseases, as it is by ~~air~~ the constant inhalation of air, and by the daily use of aliment. - But lastly, even acquired diseases when they are of an acute nature often ~~[illegible]~~ carry off habitual or chronic diseases, & sometimes destroy the predisposition to them. The plague, and yellow fever have often in this way added years to ~~of health and~~ the life and health ~~to vast~~ of persons previously ~~[illegible]~~ the most delicate constitutions, and who were often

told in some northern countries, the toes are destroyed without the patient feeling any pain, and the cold thereby permitted to affect the whole body with disease & death.

V. In entering upon this part of my course I am left with fewer ~~resources~~ aids from my predecessors, ~~in this~~ than from any of the other branches of medicine. Dr Boerhaave began a system of pathology, but left it in an imperfect state. Dr Haller and Dr Hoffmans works abound with excellent pathological remarks, but they are without order or principles. Dr Gaubius has given us an ~~complete~~ extensive system of pathology, but it founded so exclusively upon the humoral pathology of his

in disposed with fatal but dangerous diseases.
The healthy diseases may be compared to the ~~constant~~ daily
Variations in the temperature and motions of
the Air ‡ see below ~~of the benefits we derive from~~
~~‡~~ I have thus far spoken ~~only of~~ what
may be called acquired diseases only, but the body
~~we~~ derives great benefits from what I have
called natural or vital diseases such as they
hunger, thirst, menstruation pregnancy & parturition.
They are necessary to originate as well as
~~because the~~ life of ~~the human body~~
to preserve ~~existence~~. In short ~~we~~
~~the~~ body is
~~are~~ kept alive by these diseases as certain
ly as ~~we are~~ it is by the Air ~~we breath~~, and
by ~~our~~ daily aliment.

‡ which preserve its purity & healthiness,
while the acquired diseases ~~resemble~~ hurri=
=canes which with all the terror & desolati=
=on they spread thro a country, serve
them chase away Epidemics, & cure
~~old and~~ diseases which had long eluded the
power of medicine.

master Dr Boerhaave, and ~~without~~ is so obscure that ~~little~~ no assistance can be derived from it ~~in [illegible]~~ ~~[illegible] pathology~~ that will accord with the principles I purpose to deliver in this part of our Course.

In the wilderness that is before me I venture therefore alone and with trembling steps. ~~[illegible]~~. The stars by night, and the course of ~~the rivers~~ streams of water by day, or in other words, facts as real & as unchangeable as the stars & streams of water ~~[illegible]~~ shall be my only guides in my attempt to travel ~~find~~ through it. Should I be seduced for a moment by any thing that shall counterfeit those great & certain marks, I sincerely hope you may at once detect my errors, and refuse to follow me.

By Pathology I mean that Science which treats of the causes, effects, seats & signs of dis=
=eases."

There have been many definitions of disease. ~~Thus~~ The best exceptionable of any that I have met with is that which Dr Sydenham has rejected in the preface to his Works. It is as follows.
" Disease consists in the confused & irregu=
=lar operations of disordered & debilitated nature." You will I hope see the ~~There is much purport~~ truth and propriety of this definition when I come to deliver the history of the causes & phaenomena of diseases. It embraces the functions of both body and mind.

The causes of diseases have been divided into remote, predisposing, occa=
=sional or exciting, and proximate.

I shall briefly illustrate what I mean by each of them by two or three examples.

The Action of Cold is the remote cause of inflammatory fevers. The Debility & excitability in the blood vessels induced by this Cold is ~~the~~ its predisposing cause. The heat of a the Vernal Sun, or a stove room, or of a warm bed is its occasional or exciting cause, and a convulsion in the blood vessels its proximate cause by which I mean ~~with~~ what Dr Gambier calls "ipse morbus," or the disease itself.

Again – Marsh exhalations are the remote cause of bilious fevers, the Debility and excitability induced by them in the

blood vessels are its predisposing cause — — a fright — fatigue — or an intemperate meal is its exciting cause, — and its proximate cause is a convulsion in the blood vessels & disease in some of its forms in the ~~coats of the~~ stomach and bowels.

Lastly. — Intemperance is the remote cause of Gout — the debility & irritability induced ~~by the lap~~ in every part of the system being over stimulated by the excess in eating & drinking is its predisposing cause, — Fatigue, watching, or an ~~unwholesome~~ ~~or a Dyspepsia~~ ~~of~~ article of indigestible aliment, is its exciting or occasional cause, & a convulsion in the blood vessels or a spasm in the stomach, are its proximate cause, or the Gout itself. —

You are not to suppose that ~~all these~~ the concurrence of the remote, predisposing & exciting causes, ~~as~~ like distinct links of a chain are necessary to produce each of those diseases. By no means. Cold may become at once the remote-predisposing & exciting cause of an inflammatory fever. Miasmata may become at once the ~~re~~remote-predisposing & exciting cause of a bilious fever, & a ~~number~~ fit of intoxication may become ~~both~~ the remote-~~cause~~ predisposing & exciting cause of a paroxysm of Gout.

But further, - there are diseases in which ~~but~~ two of the causes prior to the proximate, ~~are ever coexistent~~ are constantly united.

For example ~~Thus~~, a Nail in the foot ~~is~~ is at all times both the remote & exciting cause of Tetanus; and the poison ~~Cause of Hydrophobia~~ - ~~debility & irritability in~~ of a rabid animal, as also the varioloous ~~the muscles, its predisposing, & consecutive~~ ~~Motion in the muscles its proximate~~ matter are at all times both ~~the~~ remote & exciting causes in the former case of Hydrophobia, & in the latter ~~of~~ the small pox. —

One more, there are cases in which the remote ~~cause becomes at once the~~ predisposing, & exciting causes are ~~to~~ completely united ~~and~~ in the production of disease. Thus the exhalations from a hogshead of putrid river water ~~to~~ ~~because~~ produced death in a number of sailors at Rochfort without the apparent inter==vention of ~~debility~~ predisposing debility

or ~~an exciting~~ the aid of ~~an~~ the additional stimulus of an exciting cause.

I have delivered these definitions & explanations of the causes of diseases in conformity to the practice of the old schools of medicine. They will be resumed in another form, and with some amplification in our history of the phenomena & formation of disease, which will be the next object of our attention. ~~For this purpose I shall~~ first deliver & endeavour to demonstrate a few general propositions.